

**IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF TEXAS
HOUSTON DIVISION**

PERFORMANCE AFTERMARKET	§	
PARTS GROUP, LTD., <i>et al.</i> ,	§	
Plaintiffs,	§	
	§	
v.	§	CIVIL ACTION NO. H-05-4251
	§	
TI GROUP AUTOMOTIVE	§	
SYSTEMS, INC.,	§	
Defendant.	§	

MEMORANDUM ON CLAIM CONSTRUCTION

This patent case is before the Court for construction of the disputed claim terms in United States Patent No. 4,860,714 (“the ’714 Patent”) and United States Patent No. 5,452,701 (“the ’701 Patent”) owned by Defendant TI Group Automotive Systems, Inc. (“TI Group”). The Court conducted a hearing pursuant to *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 390 (1996) (“*Markman* hearing”) on December 18, 2006. Based on the evidence before the Court, primarily the language of the claims and the patent specifications, the arguments presented by counsel at the *Markman* hearing, and the governing legal authorities, the Court issues this Memorandum construing the disputed claim terms.

I. FACTUAL AND PROCEDURAL BACKGROUND

Performance Aftermarket Parts Group, Ltd. (“Performance”) is a limited partnership that supplies automotive products to companies primarily outside the United States, and G&C Automotive Distributors, Inc. (“G&C”) is a corporation whose principals own Performance. TI Group markets both original and replacement automotive fuel pumps and fuel pump modules, while Performance sells only aftermarket replacement parts.

TI Group is the owner of the ’714 Patent and the ’701 Patent. The ’714 Patent, issued in 1989, is directed to an in-tank fuel pump assembly for fuel-injected engines. The assembly contains a fuel reservoir with one opening for supplying fuel to the engine and another port for returning the fuel to the reservoir. The reservoir contains a high-pressure electric pump, a jet pump, and a separate valve associated with each opening. The jet pump draws fuel from the fuel tank into the reservoir. The ’701 Patent, issued in 1995, adds a turbine pump to provide fuel both to the engine and separately to the jet pump. The fuel pump assemblies covered by the Patents are an improvement over previous assemblies because they provide a constant and reliable supply of fuel to the vehicle’s engine even when there is little fuel in the fuel tank.

TI Group alleges that Performance’s products infringe these two patents, specifically Claims 2 and 8 of the ’714 Patent and Claims 1 and 14 of the ’701 Patent.

Because the parties dispute the proper construction of certain terms in these claims, the Court is required to construe those terms. The parties filed their Amended Joint Claim Construction and Prehearing Statement [Doc. # 66] and memoranda of law in support of their respective claim construction proposals. The Court then conducted a *Markman* hearing, during which both sides presented expert testimony and counsels' oral argument regarding their respective proposed claim constructions.

II. GENERAL LEGAL STANDARDS FOR CLAIM CONSTRUCTION

“It is a ‘bedrock principle’ of patent law that ‘the claims of a patent define the invention to which the patentee is entitled the right to exclude.’” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (*en banc*) (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Systems, Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)), *cert. denied*, ___ U.S. ___, 126 S. Ct. 1332 (2006). The patent claims in issue must be construed as a matter of law to determine their scope and meaning. *See, e.g., Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 390 (1996), *aff'g*, 52 F.3d 967, 976 (Fed. Cir.) (*en banc*).

The words of a claim “are generally given their ordinary and customary meaning.” *Phillips*, 415 F.3d at 1312 (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)). The “ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the

art in question at the time of the invention, *i.e.*, as of the effective filing date of the patent application.” *Id.* at 1313. This “person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification.” *Id.*

Sometimes, however, the claim terms are not given their ordinary and customary meaning. “The patentee is free to act as his own lexicographer, and may set forth any special definitions of the claim terms in the patent specification or file history, either expressly or impliedly.” *Schoenhaus v. Genesco, Inc.*, 440 F.3d 1354, 1358 (Fed. Cir. 2006) (citing *Irdeto Access, Inc. v. Echostar Satellite Corp.*, 383 F.3d 1295, 1300 (Fed. Cir. 2004)). However, for a patentee to act as his own lexicographer, the specification must contain a clear indication that the patentee intended to do so. *See Abraxis Bioscience, Inc. v. Mayne Pharma (USA) Inc.*, 467 F.3d 1370, 1376 (Fed. Cir. 2006) (finding that patentees acted as their own lexicographer by stating in the specification: “By the term ‘edetate’ we mean ethylenediaminetetraacetic acid (EDTA) and derivatives thereof . . .”); *Boss Control, Inc. v. Bombardier, Inc.*, 410 F.3d 1372, 1377 (Fed. Cir. 2005); *Merck & Co., Inc. v. Teva Pharmaceuticals USA, Inc.*, 395 F.3d 1364, 1370 (Fed. Cir.), *cert. denied*, ___ U.S. ___, 126 S. Ct. 488 (2005). The Federal Circuit has “repeatedly emphasized that the statement in the specification must have sufficient clarity to put one reasonably skilled in the art on notice that the inventor

intended to redefine the claim term.” *Merck*, 395 F.3d at 1370; *see also Innova/Pure Water, Inc. v. Safari Water Filtration Systems, Inc.*, 381 F.3d 1111, 1117 (Fed. Cir. 2004) (noting that patent applicant must “set out the different meaning in the specification in a manner sufficient to give one of ordinary skill in the art notice of the change from ordinary meaning”). The special definitions of the claim terms must appear in the patent specification or file history and may not be contained only in the preferred embodiment. *See LG Electronics, Inc. v. Mizcom Electronics, Inc.*, 453 F.3d 1364, 1374 (Fed. Cir. 2006).

For certain claim terms, “the ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words.” *Phillips*, 415 F.3d at 1314 (citing *Brown v. 3M*, 265 F.3d 1349, 1352 (Fed. Cir. 2001)).

For other claim terms, however, the meaning of the claim language may be less apparent. To construe those terms, the Court considers “those sources available to the public that show what a person of skill in the art would have understood disputed claim language to mean [including] the words of the claims themselves, the remainder of the specification, the prosecution history, and extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art.” *Id.* (citing

Innova, 381 F.3d at 1116). The Court may also consider dictionaries, both technical and general purpose. *See id.*

The claims “provide substantial guidance as to the meaning of particular claim terms.” *Id.* The Court may consider the context in which the terms are used and the differences among the claims. *See id.* “Because claim terms are normally used consistently throughout the patent, the usage of a term in one claim can often illuminate the meaning of the same term in other claims.” *Id.* Because the claims “are part of a fully integrated written instrument,” the Court may also consider the specification and the patent’s prosecution history. *Id.* at 1315, 1317. Indeed, the specification “is the single best guide to the meaning of a disputed term.” *Yoon Ja Kim v. Conagra Foods, Inc.*, 465 F.3d 1312, 1318 (Fed. Cir. 2006) (quoting *Phillips*, 415 F.3d at 1315).

The Court may also consider “extrinsic evidence, which ‘consists of all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises.’” *Id.* at 1317 (quoting *Markman*, 52 F.3d at 980). Yet although extrinsic evidence may assist the Court in claim construction, it is “less significant than the intrinsic record in determining the legally operative meaning of claim language.” *Id.* (internal quotations and citation omitted). As a result, extrinsic evidence should be “considered in the context of the intrinsic evidence.” *Id.* at 1319.

The Federal Circuit has emphasized that “there is no magic formula or catechism for conducting claim construction. Nor is the court barred from considering any particular sources or required to analyze sources in any specific sequence, as long as those sources are not used to contradict claim meaning that is unambiguous in light of the intrinsic evidence.” *Id.* at 1324. “The sequence of steps used by the judge in consulting various sources is not important; what matters is for the court to attach the appropriate weight to be assigned to those sources in light of the statutes and policies that inform patent law.” *Id.* (citing *Vitronics*, 90 F.3d at 1582).

III. CONSTRUCTION OF DISPUTED CLAIM TERMS

The parties agree on the proper construction of several claim terms. Consequently, as to these claim terms, there is no controversy and the Court adopts the parties’ agreed construction.¹

Several of the disputed claim terms appear in more than one claim. Rather than construe the disputed terms claim by claim, which would result in significant repetition,

¹ The following term appears in Claim 8 of the ’714 Patent: “so that more fuel enters the reservoir through the opening than leaves the reservoir through the supply port thereby creating a net flow of fuel from the bottom to the top of the reservoir.” Although Performance has withdrawn its objection to TI’s proposed construction of this term, the Court does not construe the term to require that the “fuel overflows the reservoir” as proposed by TI. Instead, the Court construes the term to mean that “more fuel is drawn into the reservoir through the opening at the bottom of the reservoir than is pumped out of the reservoir to the engine through the supply port, creating a net flow of fuel from the bottom to the top of the reservoir.”

the Court will construe each term and that construction will apply to the claim term each time it appears in a claims in the either Patent.

The Court has carefully reviewed the Patents and other evidence of record, has considered counsel's arguments presented at the *Markman* hearing, and has applied governing Federal Circuit authority. On this basis, the Court construes the following terms in the '714 Patent and the '701 Patent.

A. "Immediately Adjacent the Bottom"/ "In the Region of the Bottom"

Claims 1 and 14 of the '701 Patent include the term "immediately adjacent the bottom thereof" and "immediately adjacent the bottom of the fuel tank." The Court construes these terms to mean "very close to the bottom but not flush against the bottom."

Claim 2 of the '714 Patent includes the term "in the region of the bottom of the fuel tank." The Court construes this term to mean "close to the bottom but not flush against the bottom of the fuel tank."

B. "Turbine Pump"

Claims 1 and 14 of the '701 Patent include the term "turbine pump." The parties agree that the proper construction of this term includes "a pump that operates by rotating an impeller having vanes or blades," but Performance proposes that the claim term construction include "also known as a regenerative fuel pump." Performance

bases this contention on the '701 Patent's Detailed Description of the invention in the '701 Patent which states that within the reservoir "is an electrically powered turbine pump. U.S. Pat. No. 5,257,916 ["'916 Patent"] . . . illustrates and describes a turbine pump." *See* '701 Patent, Col. 2, lines 42-45. It is undisputed that the '916 Patent is entitled and describes a "Regenerative Fuel Pump." The '701 Patent also refers to the '916 Patent "for a full disclosure of a pump of the type shown in FIG. 1." *Id.*, Col. 2, lns. 66-67 - Col. 3, ln. 1.

The Court credits the testimony of Gerard Muller, a professional engineer with extensive experience in turbines and pumps. Muller testified that the figures depicted in the '701 Patent, as well as the diagrams in the '916 Patent, depict regenerative pumps. Muller also stated that a turbine pump with a circumferential array of vanes as described and depicted in the '701 Patent is a regenerative pump.

While the '701 Patent does not specifically refer to its turbine pump as a "regenerative fuel pump," it is clear from the language in the '701 Patent, as well as the '916 Patent and Muller's testimony, that the term "turbine pump" means "a pump that operates by rotating an impeller having vanes or blades, also known as a regenerative fuel pump." *See, e.g., Yoon Ja Kim v. Conagra Foods, Inc.*, 465 F.3d 1312, 1318 (Fed. Cir. 2006) (holding that although the patent did not define the term "potassium bromate replacer" as an oxidizing agent, it made clear that the potassium bromate

replacer in question was an oxidizing agent). The Court, therefore, construes the term “turbine pump” in the ’701 Patent to mean “a pump that operates by rotating an impeller having vanes or blades, also known as a regenerative fuel pump.”

C. “Circumferential Array of Vanes”

Claim 1 of the ’701 Patent includes the term “circumferential array of vanes” around the impeller. The Court construes this term to mean “a number of flat or curved surfaces arranged around the outer part of the impeller, which is generally circular in shape.”²

D. “Secondary Fuel Outlet”

Claims 1 and 14 of the ’701 Patent include the term “secondary fuel outlet” to describe the place or opening through which fuel goes from the high-pressure pump to the jet pump. The Court construes this term to mean “the place or opening through which a lesser volume of fuel passes from the high-pressure pump to the jet pump, as distinguished from the main outlet which carries a greater volume of fuel to the engine.” Performance correctly notes that the “secondary” fuel outlet has less importance to operation of the *vehicle* than the “main” fuel outlet that carries fuel to the engine, but

² Performance asserts that its proposed construction and TI Group’s proposed construction of this term are fundamentally the same and, therefore, the Court adopts TI Group’s proposed construction. However, the phrase “a number of” is vague. Because this aspect of the claim term is not in issue, the Court does not define the term further.

the “secondary” fuel outlet is no less important to the operation of the patented device. Therefore, the Court declines to include an importance element in the construction of this disputed term.

E. “Venturi” / “Venturi Tube” / “Venturi Passage”

Claim 1 of the ’701 Patent contains the term “venturi passage,” Claim 2 of the ’714 Patent includes the term “venturi tube,” and Claim 14 of the ’701 Patent contains the single term “venturi.” The parties agree that the terms “venturi,” “venturi tube,” and “venturi passage” should all be given the same construction. The evidence in the record establishes clearly that the ordinary and customary meaning of a “venturi” involves restricting or narrowing part of a passageway for the purpose of creating suction or, in other unrelated applications, for measuring flow rate.

TI Group argues that, acting as its own lexicographer, the patentee defined “venturi,” “venturi tube” and “venturi passage” to have a different, more broad meaning. Specifically, TI Group argues that the terms should be construed to mean “a tube or wall defining a passageway that is narrower, or that has a smaller cross-sectional area, than the passageway leading to it.” The patent specifications and file history do not, however, support TI Group’s argument because they do not contain sufficient clarity to put one reasonably skilled in the art on notice that the inventor intended to redefine these three venturi terms. *See, e.g., Merck & Co., Inc. v. Teva*

Pharmaceuticals USA, Inc., 395 F.3d 1364, 1370 (Fed. Cir.), *cert. denied*, ___ U.S. ___, 126 S. Ct. 488 (2005); *Innova/Pure Water, Inc. v. Safari Water Filtration Systems, Inc.*, 381 F.3d 1111, 1117 (Fed. Cir. 2004). As a result, the Court will construe these claim terms in accordance with their ordinary and customary meaning, as understood by a person of ordinary skill in the art who has read the entire patent.

Performance proposes that the terms should be construed to mean “a tube or passageway with wider sections at both ends of said tube or passageway.” This proposed construction is more narrow than a reading of the full Patents allows. For example, Figure 1 of the ’714 Patent reflects a venturi with a wider section as part of the tube or passageway. Figure 7 of the ’714 Patent, on the other hand, reflects a venturi with the wider sections separate from what is labeled the venturi. As a result, the Patents make clear that the wider sections at both ends of the tube or passageway may be, but are not required to be, part of the tube or passageway.

TI Group’s proposed construction, on the other hand, is more broad and general than is supported by the Patents. TI Group proposes that the venturi terms include any tube or other passageway that leads from a larger area, regardless of where the fluid from the tube or passageway flows and regardless of whether the flow of fluid through the tube or passageway exerts suction. As mentioned above, a person of ordinary skill in the art who has read these patents in their entirety would understand that the term

“venturi” necessarily involves a tube or passageway, with larger areas at **both** ends, which creates or exerts suction. TI Group’s proposed construction fails to require the larger area into which the fluid flows, and it fails to include the concept of suction which is vital to the term “venturi” as commonly understood by persons skilled in the art of fluid mechanics.


Having reviewed the patents in full and all other relevant evidence in the record, the Court construes the terms “venturi,” “venturi tube” and “venturi passage” for purposes of these Patents to mean “a tube or other passageway for exerting suction, which tube or passageway is narrower than the areas at both ends.” The larger areas at each end may either be part of the tube or passageway or be separate areas to which the tube or passageway is connected.

IV. CONCLUSION

The Court accepts the parties’ agreement regarding the construction of the agreed terms. The Court has considered the intrinsic evidence and, to the extent necessary, the extrinsic evidence in the record. Based on the evidence and the application of governing legal principles, the Court construes the disputed claim terms as set forth herein.

The remaining deadlines in the Court’s Scheduling Order [Doc. # 20], as modified by the Order entered May 19, 2006 [Doc. # 21], remain in effect.

SIGNED at Houston, Texas, this **22nd** day of **December, 2006**.



Nancy F. Atlas
United States District Judge